

Abstract

Oligonucleotides used to prime *in vitro* nucleic acid amplification of 16S rRNA sequences or DNA encoding 16S rRNA sequences for many species within the genus *Mycobacterium* are disclosed. Kits including such oligonucleotides are disclosed. Methods of detecting 5 *Mycobacterium* species using the oligonucleotides in *in vitro* nucleic acid amplification are disclosed.